

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Confirmation No.: 8399

Akihiko CHIBA et al.

Art Unit: 1793

Application No.: 10/821,170

Examiner: Jessee Randall ROE

Filed: April 9, 2004

Attorney Docket No.: 108421-00096

For: Co-Cr-Mo ALLOY FINE WIRE, MANUFACTURING METHOD THEREFORE,  
AND PLANAR BODY, TUBULAR BODY, STRANDED WIRE AND CABLE  
FORMED OF WIRE

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**MAIL STOP: AF**

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

July 17, 2008

Sir:

The Applicant requests review of the Final Office Action mailed March 19, 2008, the period for response being extended to July 19, 2008 by the attached Petition for Extension of Time. This request is not accompanied by an amendment to the currently pending claims, and is filed with a Notice of Appeal. Claims 1-4, 11-16 and 23-26 are pending in this application. The outstanding Office Action is the second and Final Office Action in this application. Thus, this application qualifies for Appeal.

In the Office Action, claims 1-4, 11-16 and 23-26 are rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. The Office Action alleges that the recitation of "the alloy being nickel-free" of claims 1 and 15 is not adequately described in the description. The rejection is respectfully traversed.

Applicants respectfully submit that there is a recitation of “nickel-free fine wire” in paragraph [0006], and that the “superior corrosion resistance and wear resistance” is indicated in paragraph [0006] as being the result of a nickel-free fine wire. The Summary of the Invention indicates that the invention is made “in light of the above demands,” which are that the alloy fine wire should be “nickel-free.” Accordingly, the Specification does provide sufficient support for the feature of the alloy being nickel free. The Summary of the Invention indicates that the claimed alloy fine wire has “excellent biocompatibility” in paragraph [0008] and, in contrast, paragraph [0003] teaches that nickel is allergenic and that it is “preferred not to contain nickel in fine-wire used in the medical field.” Thus, independent claims 1 and 15 comply with the written description requirement, and withdrawal of the rejection of the claims under 35 U.S.C. § 112, first paragraph, is respectfully requested.

In the Office Action, claims 1-4, 11-16 and 23-26 are rejected under 35 U.S.C. § 103(a) as being obvious over Stinson (U.S. Patent No. 5,891,191); and claims 1-4, 11-16 and 23-26 are rejected under 35 U.S.C. § 103(a) as being obvious over Stinson in view of Masahiko (JP 2002-363675). The Applicant submits that the rejections are made in error for at least the reasons set forth below.

**I. Omission of Essential Elements Needed for a Prima Facie Rejection**

The outstanding Office Action cites references which, alone or in combination, fail to teach or suggest each and every limitation recited in the pending claims.

**A. Rejection of Claims 1 and 15**

Claims 1 and 15 recite an alloy fine wire for biomaterials consisting of at least more than 8 weight % to 16 weight % of molybdenum, the alloy being nickel-free, and

the wire having a degree of roundness of a lateral cross section of 0.6 or more. The Office Action cites to Stinson, col. 3, lines 42-45 and claim 2, as teaching “less than about 2 weight percent nickel” (see Office Action, page 3 and page 4).

Stinson merely teaches a content of molybdenum that is “between about 4-8 weight percent molybdenum” (Stinson column 3, line 44). Nowhere else in Stinson is there any teaching of a broader range or a higher range of molybdenum content. Accordingly, Stinson fails to teach having “more than 8 weight percent to 16 weight percent of molybdenum,” as recited in claims 1 and 15. The higher range of the “more than 8 weight %” molybdenum also provides the unexpected result of a better corrosion and wear resistance, as indicated in the Specification at paragraph [0004]. Thus, obtaining a range of Mo of more than 8 percent is not obvious based on the teachings of Stinson.

The outstanding Office Action indicates that because Stinson teaches a ratio of nickel that is “less than about two weight percent nickel,” that a percentage of zero percent nickel is part of this recitation (Office Action, page 4, lines 10-16). However, Stinson teaches an alloy that includes nickel, as evidenced in the Abstract, in which the representative embodiment includes 1% nickel. Stinson teaches that “Nickel enhances the ductility of the alloys, improving its ability to be mechanically drawn or formed” (Col. 2, lines 3-6; Col. 1, lines 44-50), and thus teaches that the presence of nickel in an alloy is desirable. Stinson indicates that the invention relates to an improved implantable medical device comprised of a cobalt-chromium-molybdenum alloy containing less than about 5 weight percent nickel, or containing less than about 2 weight percent nickel (column 3, lines 31-44). Although “less than about” either 5

weight percent or 2 weight percent could be interpreted as including a nickel-free alloy, the teachings of Stinson must be read in light of the entirety of the Specification and the above-cited portion in particular, which teaches that the improvement over the background art for Stinson is to decrease the level of nickel to less than 5 or less than 2 weight percent, but does not teach to eliminate nickel entirely because "Nickel enhances the ductility of the alloys..." In light of the above-discussed teachings of Stinson, the reading of "less than 5 percent" or "less than 2 percent" by the ordinary person skilled in the art cannot include a nickel-free alloy. For this reason, Stinson fails to disclose or suggest an alloy that is nickel free.

With respect to the recitation in claims 1 and 15 of "a roundness of lateral cross section of 0.6 or more," the October 1, 2007, Office Action indicates that filaments #12 of the cobalt alloy are substantially homogeneous in cross section (page 3, lines 8-12). However, these teachings are relative to concentrations of molybdenum, chromium or cobalt, and not to a specific geometric attribute, namely, roundness, as recited in claims 1 and 15. There is no teaching anywhere in Stinson of a degree of roundness, *i.e.*, a ratio of a minor diameter over a major diameter. The feature of "degree of roundness" is erroneously construed to be equivalent to concentration of the various components of the alloy. In fact, Stinson does not teach a degree of roundness of a lateral cross section of the wire being of 0.6 or more, as recited in claims 1 and 15. The Examiner has thus failed to establish a *prima facie* rejection of claims 1 and 15, which are therefore allowable over the cited art.

**B. Rejection of Dependent Claims 2-14, and 16-26.**


Claims 2-14 depend from claim 1. Claims 16-26 depend from claim 15.

Accordingly, the Examiner has failed to establish *prima facie* obviousness of claims 2-14, and 16-26, for at least the same reasons as outlined above.

**II. Conclusion**

For all of the above reasons, a pre-Appeal Brief review of the outstanding Office Action is respectfully requested, and a favorable decision including allowance of all pending claims is earnestly solicited. In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, referencing Attorney Dkt. No. 108421-00096.

Respectfully submitted,

  
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Enclosures: Notice of Appeal and Petition for One-Month Extension of Time